Applicant : Stephen K. Pinto et al.
Serial No. : 10/826,949
Filed : April 16, 2004
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Attorney's Docket No.: 17146-0005001

REMARKS

The comments of the applicant below are each preceded by related comments of the examiner (in small, bold type).

> **Claims 7-13 of this application conflict with claims 8-14 of Application No. 10182671 1, respectively. 37 CFR 1.78(b) provides that when two or more applications filed by the same applicant contain conflicting claims, elimination of such claims from all but one application may be required in the absence of good and sufficient reason for their retention during pendency in more than one application. Applicant is required to either cancel the conflicting claims from all but one application or maintain a clear line of demarcation between the applications. See MPEP § 822.**

The applicant disagrees with the examiner's position but may file a terminal disclaimer depending on the future course of the prosecution in light of the current amendments.

> **Claims 1-13 are rejected under 35 U.S.C. 102(b) as being anticipated by Bounsaythip and Rinta-Runsala "Overview of Data Mining for Customer Behavior Modeling" - Finland: VTT Information Technology, Research Report TTEI -1 8, 2001 (hereinafter "Bounsaythip").**
> **As to independent claim 1, Bounsaythip discloses a machine-based method comprising receiving historical (see Page 7, Figure 3) multi-dimensional data representing multiple variables (e.g., multi-dimensional) (see Page 13, Section 3.3.1 Definition; and Page 44, Checkpoint 5), transforming variables into more predictive variables (e.g., predictive model) (see Page 8, Section 2.4.1 Data sampling), including Bayesian renormalized variables (see Page 32, Section 3.8 Other data mining methods; and Page 18, Section 3.4.4 Advantages/Disadvantages), linearly transformed and nonlinearly transformed variables and imputed missing values for categorical or continuous variables (e.g., classification and regression) (see Page 11, Classification and Regression), pruning variables for which the data is sparse or missing (e.g., pruning) (see Page 19, Section 3.5.2 Tree induction), adjusting a population of variables to represent main effects exhibited by the data and significant interaction and non-linear effects exhibited by the data (e.g., data mining to visualize non-linear interaction of variables) (see Page 10, First two Paragraphs), and using the adjusted population of variables to generate a predictive model for interacting with a commercial system (e.g., build the model to predict) (see Page 7, Section 2.4 Model building).**

Claim 1 recites transforming variables into more predictive variables that include "*Bayesian renormalized variables*". In rejecting the claim, the examiner located the single word "Bayesian" from the term "Bayesian belief networks" described on page 32 of Bounsaythip and the single word "normalized" in the sentence "… the inputs need also to be normalized between 0 and 1" in an entirely different section on page 18 of Bounsaythip. The examiner then asserted that the combination of the two single words "Bayesian" and "normalized" found in different contexts in unrelated sections of the reference anticipated the "*Bayesian renormalized variables*" recited in claim 1.

The applicant disagrees with the rejection based on such an artificial combination of two unrelated single words at different points in the reference. In Bounsaythip, neither the word "Bayesian" or the word "normalized", alone or in combination, described or would have made obvious the "Bayesian renormalized variables" recited in claim 1. In particular, Bayesian belief networks, according to Bounsaythip, were a model for representing uncertainty in a certain domain (page 32, section 3.8). On the other hand, normalized inputs were used in neural networks (page 18, section 3.4.4).

Accordingly, Bounsaythip did not describe and would not have made obvious transforming variables into more predictive variables that include "*Bayesian renormalized variables*", let alone "transforming the variables into the Bayesian renormalized variables including adjusting a response frequency associated with a variable by a Bayesian analysis based on a priori response frequency associated with the variable", also recited by claim 1.

> **As to independent claim 7, Bounsaythip discloses a machine-based method comprising in connection with a project based on historical data about a system being modeled (see Page 7, Figure 3), generating a predictive model (e.g., build the model to predict) (see Page 7, Section 2.4 Model building), and portraying to a user through a graphical user interface a sequence of dimension reduction having two or more steps (e.g., dimension reduction) (see Page 6, Last Paragraph continuing to Page 7; and Page 14, Section 3.3.3 Advantages/Disadvantages).**

Amended claim 7 recites enabling a user to *interactively manage a sequence of dimension reduction* through a graphical user interface. Bounsaythip provided a user with a graphical user interface for *visualizing* interactions between data (page 14, figure 8 and section 3.3.3), not for *interactively managing* a sequence of dimension reduction. Bounsaythip's user interface presented only the *result* of the dimension reduction (page 14, section 3.3.3), not *a sequence of dimension reduction*. In addition, Bounsaythip's graphical user interface did not include "an activation portion, which upon activation, enables the user to revisit at least one of the steps", also recited by claim 7. Bounsaythip said:

> ... SOM can learn from complex, multi-dimensional data and transform then into a map of fewer dimensions, such as a 2-dimensional plot. The 2-dimensional plot provides an easy-to-use graphical user interface to help the decision-maker visualize the similarities between preference patterns. .... By using the information contained in the 10-variable set by mapping the information into a 2-dimensional space, one can visually combine customers with similar attributes. (page 14, section 3.3.3)

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Accordingly, Bounsaythip did not describe and would not have made obvious the features of claim 7.

All of the dependent claims are patentable for at least similar reasons as those for the claims on which they depend are patentable.

Canceled claims, if any, have been canceled without prejudice or disclaimer.

Any circumstance in which the applicant has (a) addressed certain comments of the examiner does not mean that the applicant concedes other comments of the examiner, (b) made arguments for the patentability of some claims does not mean that there are not other good reasons for patentability of those claims and other claims, or (c) amended or canceled a claim does not mean that the applicant concedes any of the examiner's positions with respect to that claim or other claims.

Please apply $555 for the Petition for Extension of Time fee and any other charges or credits to deposit account 06-1050, referencing attorney docket 17146-0005001.

Respectfully submitted,

Date: 3/9/9

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